Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (previously presented) A digital radio frequency (RF) circuit that creates a signal in a desired range in a frequency spectrum, comprising:

circuitry that produces a first sample data modulated signal having a first frequency and a first sample data clock rate;

an up-sampler modulator that receives the first sample data modulated signal and produces a second sample data modulated signal having a second frequency and a second sample data clock rate; and

circuitry that receives the first sample data modulated signal and the second sample data modulated signal and delivers one of the first sample data modulated signal and the second sample data modulated signal for further processing depending on which sample data modulated signal exhibits desirable characteristics for a given operating environment.

2. (previously presented) The RF circuit set forth in claim 1, comprising a first filter having first filter characteristics that receives the first sample data modulated signal and a second filter having second filter characteristics that receives the second sample data modulated signal.

3. (previously presented) The RF circuit set forth in claim 2, wherein at least one of the first filter and the second filter comprises a finite impulse response (FIR) filter.

4. (previously presented) The RF circuit set forth in claim 1, wherein the first frequency is less than one half of a frequency of a digital data stream on which the first sample data modulated signal is based.

5. (previously presented) The RF circuit set forth in claim 2, wherein the output of the first filter and the output of the second filter are delivered to the circuitry that receives the first sample data modulated signal and the second sample data modulated signal.

6. (previously presented) The RF circuit set forth in claim 5, wherein the first filter and the second filter each comprise a finite impulse response (FIR) filter.

7. (previously presented) The RF circuit set forth in claim 6, wherein the first filter comprises an 80 MSps FIR filter and the second filter comprises a 160 MSps FIR filter.

8. (previously presented) The RF circuit set forth in claim 1, wherein the RF circuit comprises a portion of an orthogonal frequency division multiplexing (OFDM) transceiver.

9. (canceled)

10. (canceled)

11. (canceled)

12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)

16. (canceled)

17. (previously presented) A method of processing signals, comprising:

creating a first sample data modulated signal having a first frequency and a first sample data clock rate;

up-sampling the first sample data modulated signal to produce a second sample data modulated signal having a second frequency and a second sample data clock rate; and

selecting between the first sample data modulated signal and the second sample data modulated signal; and

delivering one of the first sample data modulated signal and the second sample data modulated signal for further processing depending on which sample data modulated signal exhibits desirable characteristics for a given operating environment.

18. (previously presented) The method set forth in claim 17, comprising filtering the first sample data modulated signal and the second sample data modulated signal using different filtering characteristics.

19. (previously presented) The method set forth in claim 17, comprising filtering the first sample data modulated signal and the second sample data modulated signal using finite impulse response filters (FIRs) having different filtering characteristics.

20. (original) The method set forth in claim 17, wherein the recited acts are performed in the recited order.